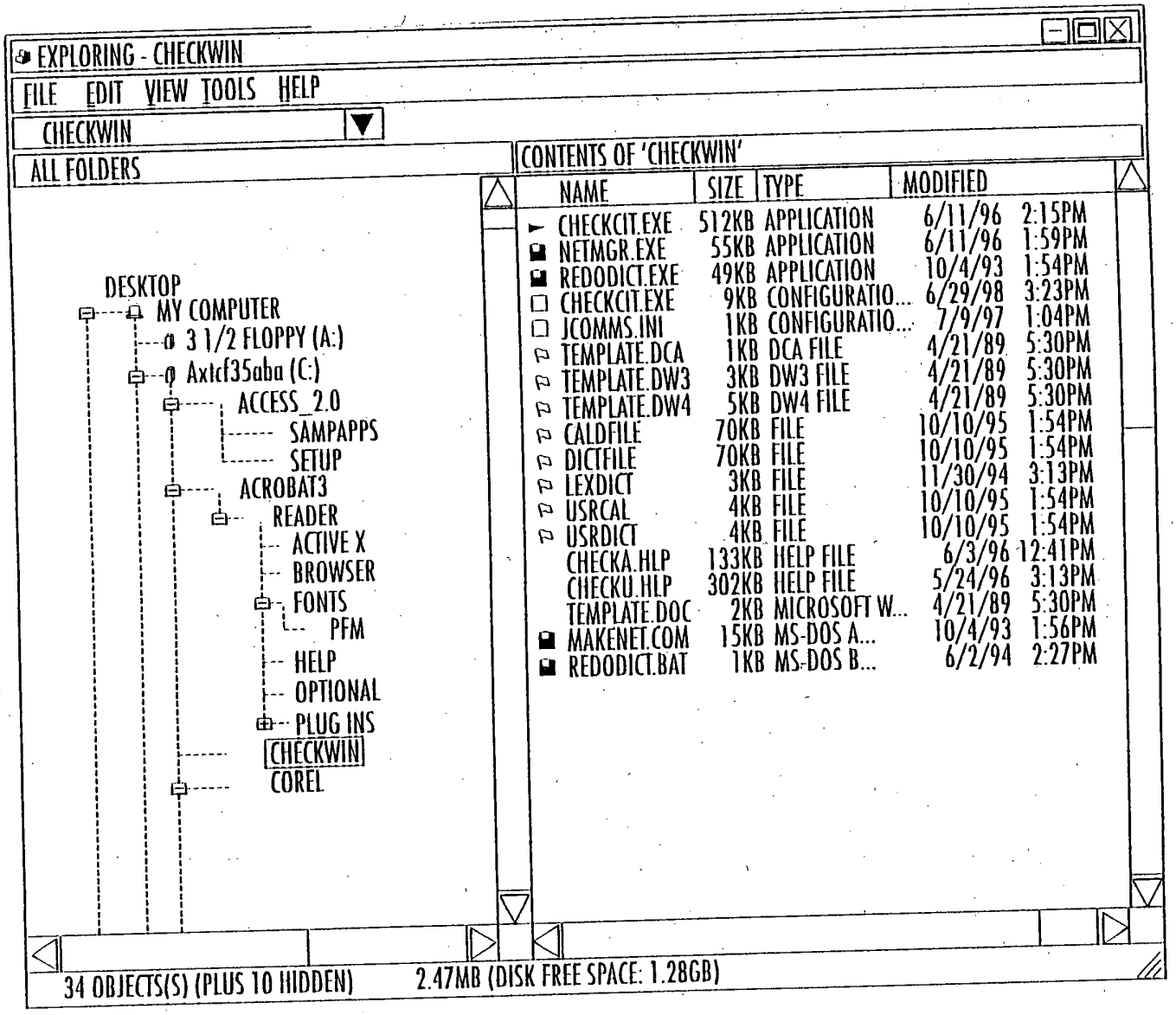

FIGURE 1
(PRIOR ART)

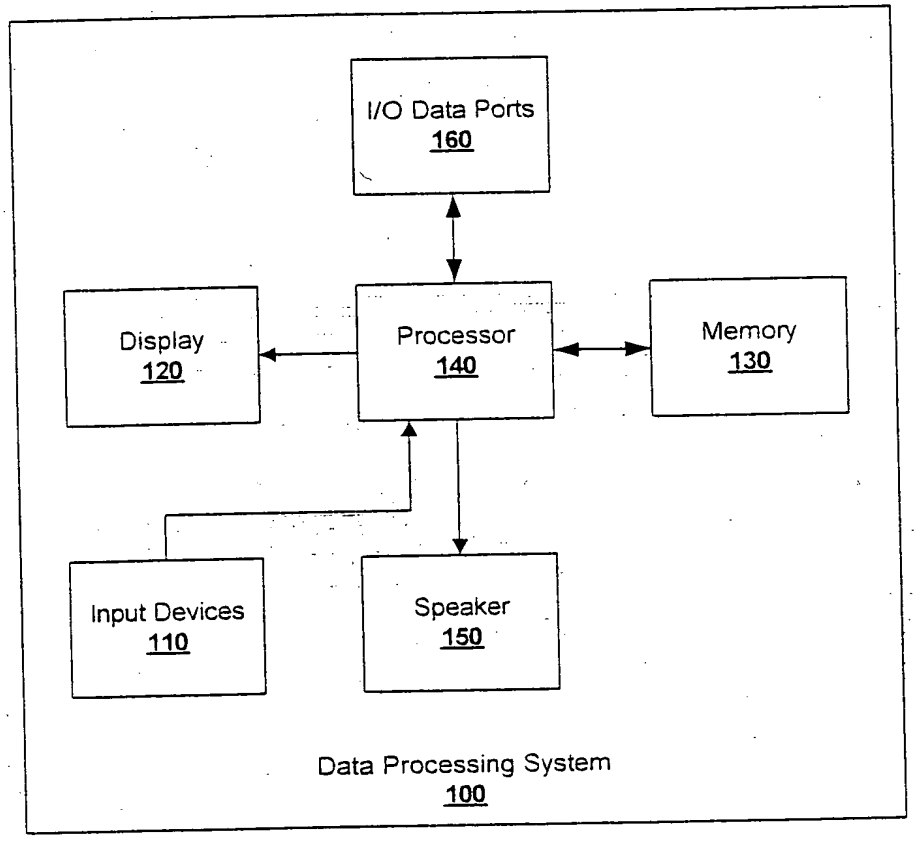
I/O Data Ports
160
Display
120
Processor
140
Memory
130
Input Devices
110
Speaker
150
Data Processing System
100

Figure 2

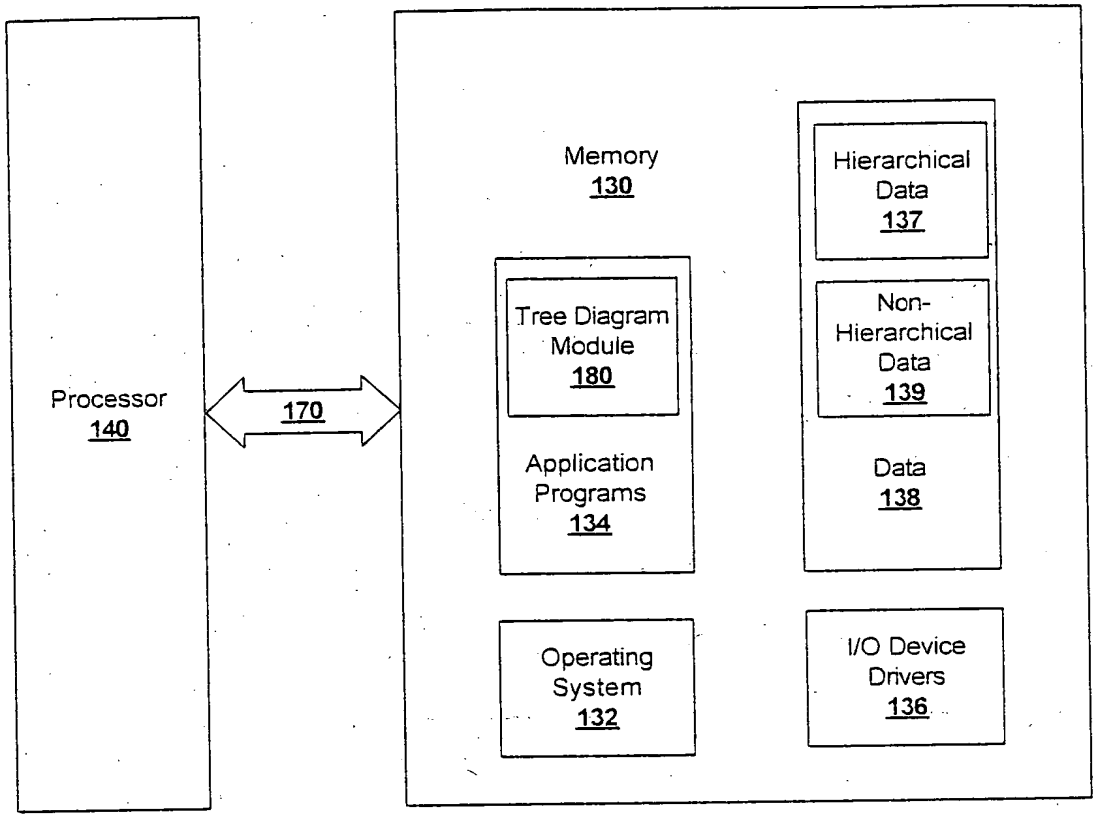
Processor
140
170
Memory
130
Tree Diagram
Module
180
Application
Programs
134
Operating
System
132
Hierarchical
Data
137
Non-
Hierarchical
Data
139
Data
138
I/O Device
Drivers
136

Figure 3

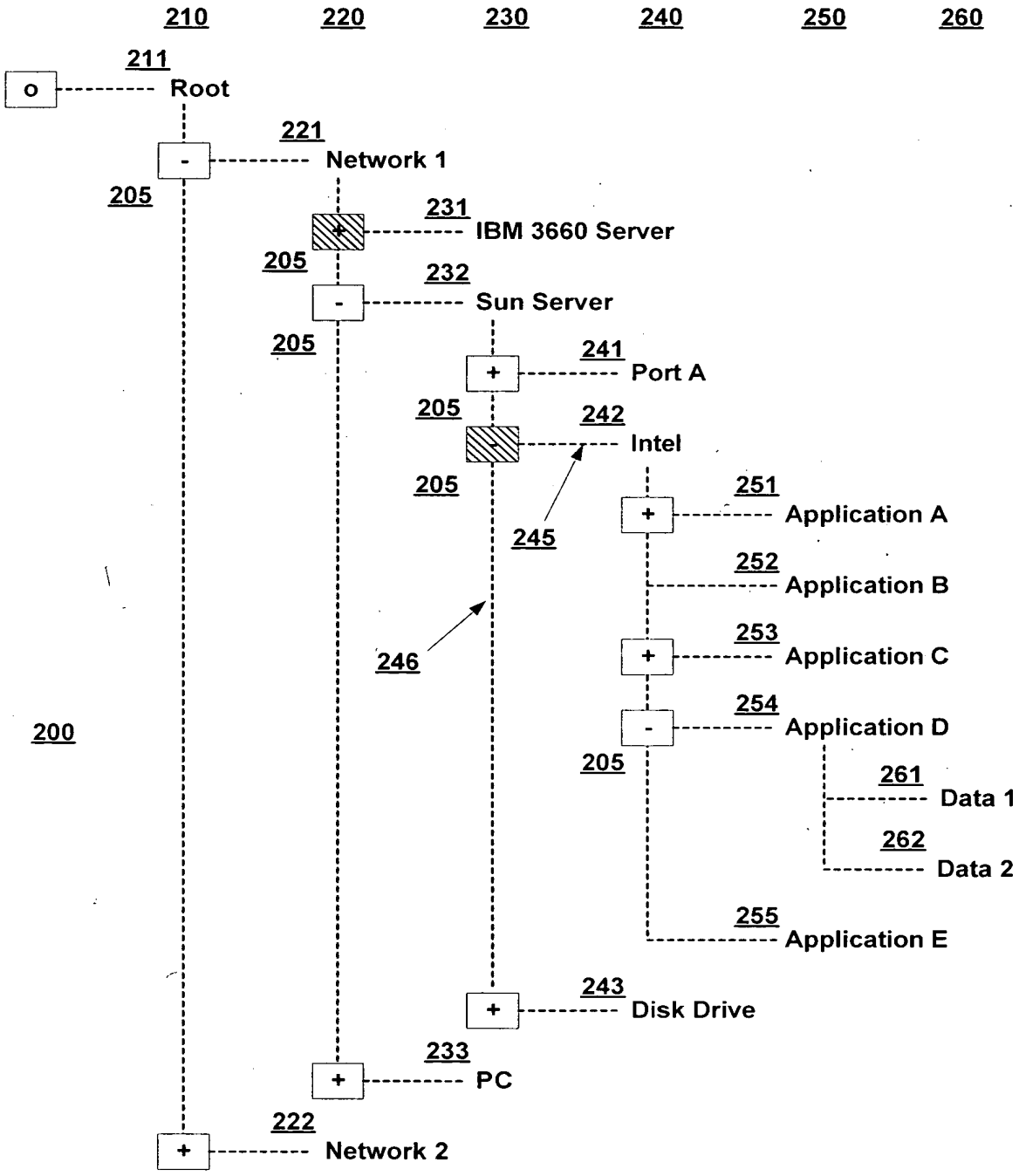
210
220
230
240
250
260
211
Root
221
Network 1
205
231
IBM 3660 Server
205
232
Sun Server
205
241
Port A
205
242
Intel
205
251
Application A
245
252
Application B
246
253
Application C
254
Application D
205
261
Data 1
262
Data 2
255
Application E
243
Disk Drive
233
PC
222
Network 2
200

Figure 4

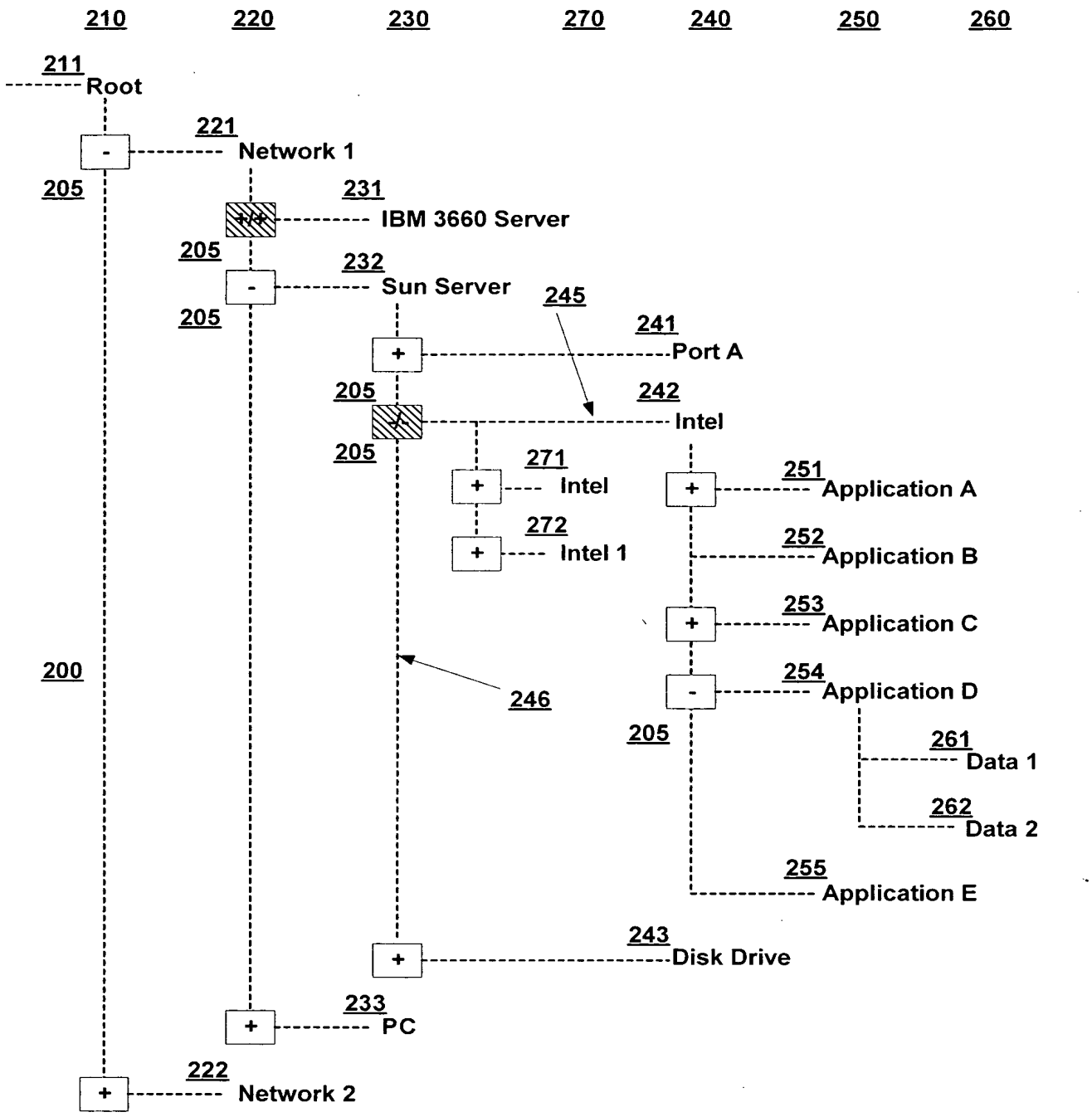
210
220
230
270
240
250
260
211
Root
221
Network 1
205
231
IBM 3660 Server
205
232
Sun Server
205
245
241
Port A
205
242
Intel
205
271
Intel
272
Intel 1
251
Application A
252
Application B
253
Application C
254
Application D
205
261
Data 1
262
Data 2
255
Application E
200
246
243
Disk Drive
233
PC
222
Network 2

Figure 5A

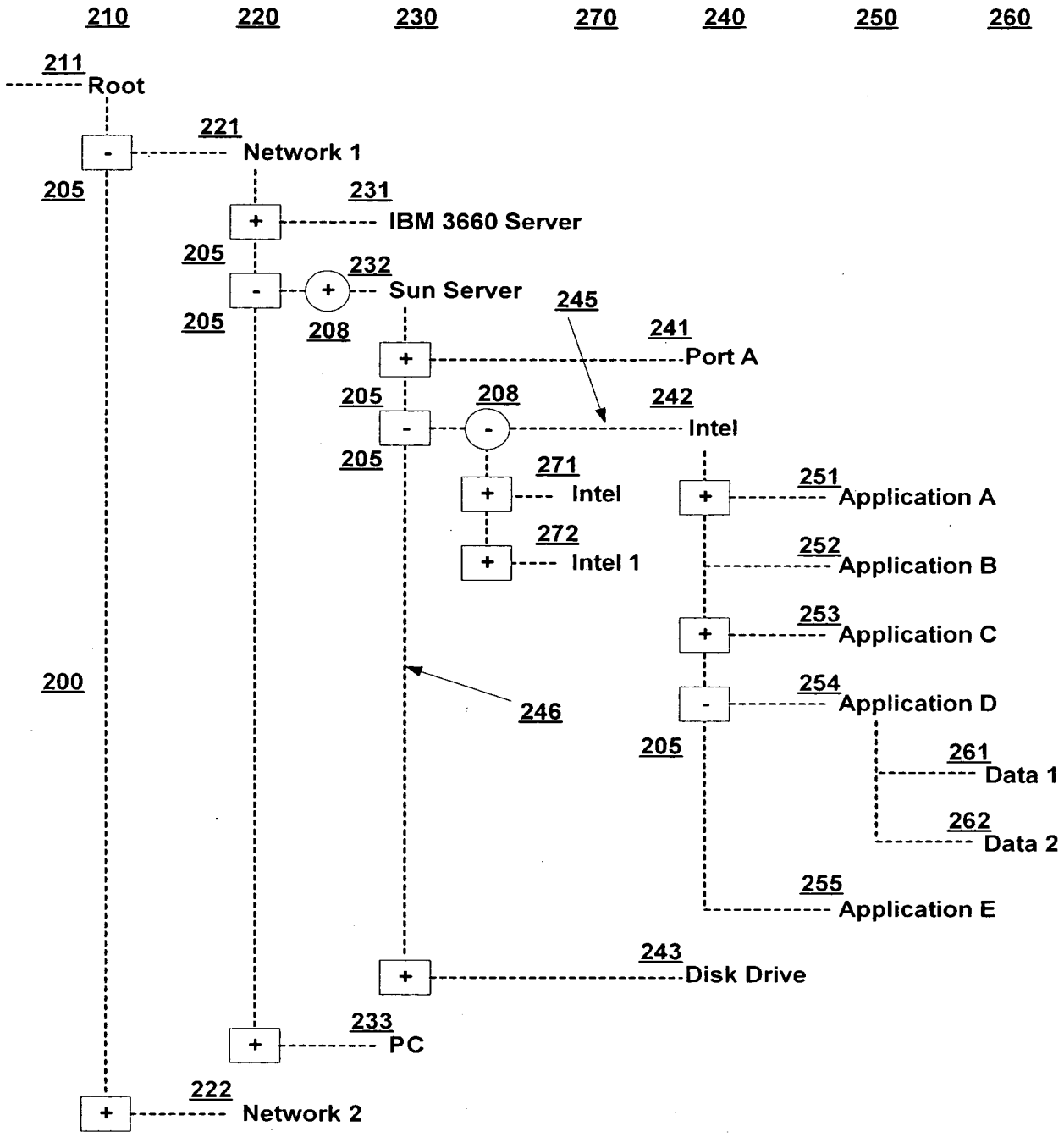
210
220
230
270
240
250
260
211
Root
221
Network 1
205
231
IBM 3660 Server
205
232
Sun Server
205
208
245
241
Port A
205
208
242
Intel
205
271
Intel
251
Application A
272
Intel 1
252
Application B
253
Application C
200
246
254
Application D
205
261
Data 1
262
Data 2
255
Application E
243
Disk Drive
233
PC
222
Network 2

Figure 5B

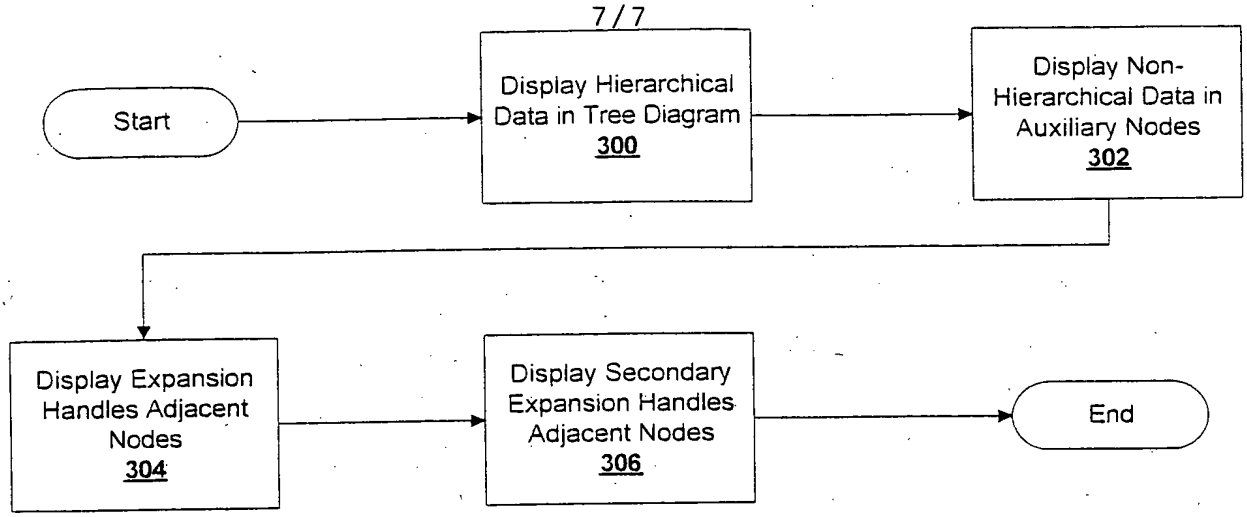

Figure 6

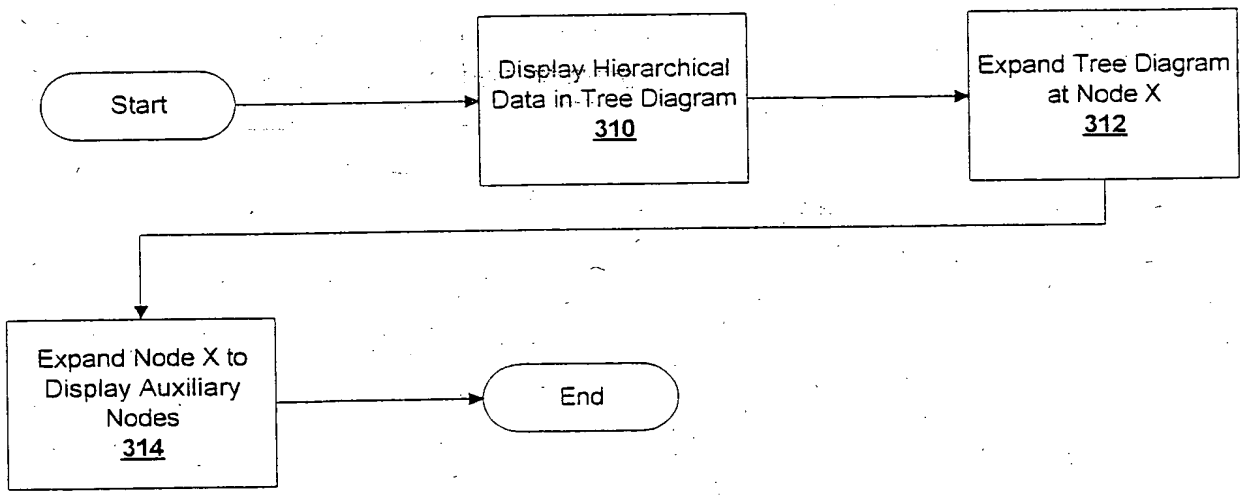

Figure 7